

sealing part at an outer peripheral part of a display area, and a liquid crystal layer is provided in the gap, wherein

1) said signal electrode is composed of a surrounding electrode formed over almost the whole area of said display area, a pattern electrode isolatedly formed within said surrounding electrode, and a wiring electrode formed across said surrounding electrode with a gap provided between said wiring electrode and said surrounding electrode in order to selectively apply voltage to said pattern electrode,

2) said counter electrode is provided over the whole area of said display area to face said signal electrode,

3) said first substrate, said second substrate, said signal electrode and said counter electrode are all transparent,

4) said liquid crystal layer is a scattering type liquid crystal layer which changes in transmittance and scattering rate depending on existence or absence of application of voltage by means of said signal electrode and said counter electrode, in which transparency increases in a part to which voltage is applied, and

5) a light source means which emits linearly polarized light is disposed outside a peripheral part of said liquid crystal display panel, and at least a part of said sealing part facing the light source means has a light transmitting property to allow linearly polarized light emitted from said light source means to pass through said sealing part and enter said liquid crystal layer.

2. (Amended) A liquid crystal display device comprising a liquid crystal display panel in which a first substrate formed with a signal electrode and a second substrate formed with a counter electrode on one surface respectively are coupled together, with said signal electrode and said counter electrode opposed each other, with a fixed gap therebetween provided by interposing a sealing part at an outer peripheral part of a display area, and a liquid crystal layer is provided in the gap, wherein

said signal electrode is composed of a pattern electrode isolatedly formed within said display area, and a wiring electrode formed across said display area in order to selectively apply voltage to said pattern electrode,

said counter electrode is provided in an area to face said pattern electrode,  
said first substrate, said second substrate, said signal electrode and said counter electrode are all transparent,

said liquid crystal layer is a scattering type liquid crystal layer which changes in transmittance and scattering rate depending on existence or absence of application of voltage by means of said signal electrode and said counter electrode, in which a scattering degree increases in a part to which voltage is applied, and

a light source means which emits linearly polarized light is disposed outside a peripheral part of said liquid crystal display panel, and at least a part of said sealing part facing the light source means has a light transmitting property to allow linearly polarized light emitted from said light source means to pass through said sealing part and enter said liquid crystal layer.

3. (Amended) A liquid crystal display device according to claim 1, wherein  
said liquid crystal display panel, in which an outside of said second substrate is a visible side,  
always presents a condition outside said first substrate to the visible side,

a luminosity of a scattering part, where the transparency does not increase, of said liquid  
crystal layer becomes higher than luminosities of other parts while a light source part of said light  
source means is turned on, and

the luminosity of said scattering part of said liquid crystal layer becomes lower than the  
luminosities of the other parts while said light source part is turned off.

4. (Amended) A liquid crystal display device according to claim 2, wherein  
said liquid crystal display panel, in which an outside of said second substrate is a visible side,  
always presents a condition outside said first substrate to the visible side,

a luminosity of a scattering part, where the scattering degree is increased, of said liquid  
crystal layer becomes higher than luminosities of other parts while a light source part of said light  
source means is turned on, and

the luminosity of said scattering part of said liquid crystal layer becomes lower than the  
luminosities of the other parts while said light source part is turned off.

5. (Amended) A liquid crystal display device according to claim 1, wherein  
said light source means comprises a light source part and a polarization separating device  
disposed between the light source part and an outer peripheral part of said liquid crystal display panel

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6. (Amended) A liquid crystal display device according to claim 2, wherein said light source means comprises a light source part and a polarization separating device disposed between the light source part and an outer peripheral part of said liquid crystal display panel.

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7. (Amended) A liquid crystal display device according to claim 5, wherein an optical means composed of a convex lens or a diffuser is provided between said light source part of said light source means and said polarization separating device.

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8. (Amended) A liquid crystal display device according to claim 6, wherein an optical means composed of a convex lens or a diffuser is provided between said light source part of said light source means and said polarization separating device.

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9. (Amended) A liquid crystal display device according to claim 5, wherein said scattering type liquid crystal layer of said liquid crystal display panel is a mixed liquid crystal layer composed of transparent solid substances and a liquid crystal, which is produced by applying ultraviolet light to liquid composed of liquid crystal and organic monomers, and said polarization separating device is disposed so that a transmission axis thereof almost matches with a direction in which a difference between a refractive index of said transparent solid substance and a refractive index of said liquid crystal of said mixed liquid crystal layer is small.

10. (Amended) A liquid crystal display device according to claim 6, wherein  
said scattering type liquid crystal layer of said liquid crystal display panel is a mixed liquid  
crystal layer composed of transparent solid substances having alignment properties and a liquid  
crystal, which is produced by applying ultraviolet light to liquid made by mixing liquid crystal  
polymers into liquid crystal and organic monomers, and

said polarization separating device is disposed so that a transmission axis thereof almost  
matches with a direction in which a difference between a refractive index of said transparent solid  
substance and a refractive index of said liquid crystal of said mixed liquid crystal layer is small.

19. (Amended) A liquid crystal display device according to claim 5, wherein  
light intensity change means which controls increase and decrease of an intensity of light to  
make incident on said liquid crystal display panel in accordance with an intensity of light incident  
on said liquid crystal display panel from outside said first substrate is provided in said light source  
means.

20. (Amended) A liquid crystal display device according to claim 6, wherein  
light intensity change means which controls increase and decrease of an intensity of light to  
make incident on said liquid crystal display panel in accordance with an intensity of light incident  
on said liquid crystal display panel from outside said first substrate is provided in said light source  
means.

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21. (Amended) A liquid crystal display device according to claim 19, wherein  
said light intensity change means comprises a liquid crystal cell provided between said  
polarization separating device and the light source part, a polarizer arranged on a light source part  
side of the liquid crystal cell, an exposure meter for detecting the intensity of the light incident from  
outside said first substrate, and a liquid crystal driving circuit for changing voltage applied to said  
liquid crystal cell in accordance with an output from said exposure meter.

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22. (Amended) A liquid crystal display device according to claim 20, wherein  
said light intensity change means comprises a liquid crystal cell provided between said  
polarization separating device and the light source part, a polarizer arranged on a light source part  
side of the liquid crystal cell, an exposure meter for detecting the intensity of the light incident from  
outside said first substrate, and a liquid crystal driving circuit for changing voltage applied to said  
liquid crystal cell in accordance with an output from said exposure meter.

Please add the following new claims:

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31. A liquid crystal display device according to claim 5, wherein  
said light source part can selectively emit lights in different optical wavelength regions.

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32. A liquid crystal display device according to claim 6, wherein  
said light source part can selectively emit lights in different optical wavelength regions.

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33. A liquid crystal display device according to claim 5, wherein said light source part can be selectively turned on in accordance with brightness of environments or strength of incoming light, and period in which said light source part is turned on can be selected.

34. A liquid crystal display device according to claim 6, wherein said light source part can be selectively turned on in accordance with brightness of environments or strength of incoming light, and period in which said light source part is turned on can be selected.

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